

Title (en)  
A programmable divider circuit

Title (de)  
Programmierbare Teilerschaltung

Title (fr)  
Circuit diviseur programmable

Publication  
**EP 0926834 B1 20020320 (EN)**

Application  
**EP 98310160 A 19981211**

Priority  
GB 9727245 A 19971223

Abstract (en)  
[origin: EP0926834A1] A programmable dividing circuit comprises a first plurality N of similar transistor stages (B1,B2) connected in a divide-by-N sequence, where N is an odd integer, the transistor stages being configured so that when the output of the last stage is supplied to the first stage in the sequence, the dividing circuit operates as a divide-by-N circuit in which an output signal is generated which has one cycle for every N cycles of a clock signal applied to the transistor stages, a tri-state inverter (T) selectively connectable in a divide-by-M sequence with a second plurality M of transistor stages (B1,B3,B4), where M is an even integer, and wherein the second plurality includes at least some of said first plurality of transistor stages, including said first stage, whereby when the output of the last stage in the divide-by-M sequence is supplied to the first stage, the circuit operates as a divide-by-M circuit in which an output signal is generated which has one cycle for every M cycles of a clock signal applied to the transistor stages, and a switching circuit (MUX) having at least two inputs and arranged to selectively connect to the first stage the output of the last stage in either the divide-by-N sequence or the divide-by-M sequence whereby the circuit can be programmed to operate as a divide-by-N or divide-by-M circuit.

IPC 1-7  
**H03K 23/66**; **H03K 23/54**

IPC 8 full level  
**H03K 23/54** (2006.01); **H03K 23/66** (2006.01)

CPC (source: EP US)  
**H03K 23/544** (2013.01 - EP US); **H03K 23/66** (2013.01 - EP US); **H03K 23/667** (2013.01 - EP US); **H03L 7/183** (2013.01 - EP US)

Cited by  
WO0229973A3; US6518805B2; US6661261B2; US6882189B2; US7005898B2

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0926834 A1 19990630**; **EP 0926834 B1 20020320**; DE 69804287 D1 20020425; DE 69804287 T2 20021121; GB 9727245 D0 19980225; US 6133796 A 20001017

DOCDB simple family (application)  
**EP 98310160 A 19981211**; DE 69804287 T 19981211; GB 9727245 A 19971223; US 22129698 A 19981223